Universidad Zaragoza

Academic Year/course: 2021/22

29981 - Legal responsibility and profesional ethics

Syllabus Information

Academic Year: 2021/22
Subject: 29981 - Legal responsibility and profesional ethics
Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
Degree: 430 - Bachelor's Degree in Electrical Engineering
434 - Bachelor's Degree in Mechanical Engineering
435 - Bachelor's Degree in Chemical Engineering
436 - Bachelor's Degree in Industrial Engineering Technology
438 - Bachelor's Degree in Telecomunications Technology and Services Engineering
439 - Bachelor's Degree in Informatics Engineering
440 - Bachelor's Degree in Electronic and Automatic Engineering
470 - Bachelor's Degree in Architecture Studies
476 -
558 - Bachelor's Degree in Industrial Design and Product Development Engineering
581 - Bachelor's Degree in Telecomunications Technology and Services Engineering
ECTS: 4.0
Year: 470 - Bachelor's Degree in Architecture Studies: 5
581 - Bachelor's Degree in Telecomunications Technology and Services Engineering: 3
434 - Bachelor's Degree in Mechanical Engineering: 4
440 - Bachelor's Degree in Electronic and Automatic Engineering: 4
439 - Bachelor's Degree in Informatics Engineering: 4
435 - Bachelor's Degree in Chemical Engineering: 4
430 - Bachelor's Degree in Electrical Engineering: 4
436 - Bachelor's Degree in Industrial Engineering Technology: 4
438 - Bachelor's Degree in Telecomunications Technology and Services Engineering: 4
476 - : XX
558 - Bachelor's Degree in Industrial Design and Product Development Engineering: 4

Semester: First semester
Subject Type: Optional
Module:

1. General information

1.1. Aims of the course

- Encouragement of the students' critical capacity for the evaluation and weighting of different ethical criteria in their professional activity.

- Approximation to the reality of the future professional exercise, knowing the different types of activities developed by engineers and architects and the associated personal and legal responsibility.

These objectives are aligned with some of the Sustainable Development Goals, SDG, of the 2030 Agenda (https://www.un.org/sustainabledevelopment/es/) and certain specific goals, in such a way that the acquisition of the learning outcomes of the subject provides training and competence to the student to contribute to a certain extent to its achievement:

- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

  Target 8.8. Protect labour rights and promote safe and secureworking environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

- Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

  Target 16.5. Commit to the positive effects of technology and reduce bad practices in the responsible exercise of the proffesion

1.2. Context and importance of this course in the degree

The subject is offered as an elective to all students of the School of Engineering and Architecture, where students can complete the technical training previously received through a subject of eminently applied to their professional future.

Responsibility and ethics in professional performance are essential elements of the formative curriculum of the new Spanish and European University, supported by the Bologna Declaration of 1999 (although the importance of the teaching of values and attitudes is made explicit from the Declaration of Berlin 2003). Future professionals must develop, in their university education, in addition to cognitive and technical skills, other social and ethical.

1.3. Recommendations to take this course

There are no prerequisites to take this course, it is recommended to any student of engineering or architecture of the EINA. In order to study this subject, it is only necessary to have motivation to know aspects of real life in the professional practice of the engineer or architect, and to acquire ethical and socially responsible abilities to act in the situations and conflicts that may arise.

2. Learning goals

2.1. Competences

GENERIC COMPETENCES
1. Ability to communicate and transmit knowledge, skills and abilities in Spanish.
2. Ability to analyze and evaluate the social and environmental impact of technical solutions, acting with ethics, professional responsibility and social commitment, always looking for quality and continuous improvement.

SPECIFIC COMPETENCES
1. Ability to identify, evaluate and cover the risks associated with the professional practice of the various engineering and architectural activities.
2. Ability to incorporate the ethical aspects in the decision making in the professional activity.

2.2. Learning goals

? Know the context of the professional practice of engineering and architecture in their different activities and values the implicit responsibility in each one.

? Be aware of the risks associated with professional decision-making and how to manage them properly.

? Know the existence and the mechanisms of application of the deontological norms of the professions.

? Acquires criteria for the analysis of practical cases of ethical dilemma in the exercise of professional activities.

2.3. Importance of learning goals

Training in ethical and civic competences is an essential part of university education, since it is an interpersonal transversal competence in the performance of any profession. In professional practice, decision-making is often a complex process, since it must be taken with limited information, sometimes with little time, and trying to balance competing interests. The subject aims to introduce to the ethical and responsible professional practice, which offers students of engineering and architecture the possibility of developing their own criteria to identify and face ethical problems in real situations of their future work activity, and to collaborate in the integration of values In the decision structures of organizations. The subject also aims to make future professionals aware of the risks associated with the professional practice in the different types of engineering and architecture activities, their legal and personal consequences, and the mechanisms to cover possible situations of legal liability.

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The acquisition of competences by the student will be evaluated continuously throughout the course through:
1. Written resolution of two case studies (50%)
2. Oral presentations (50%)
Following the regulations of the University of Zaragoza in this regard, a global assessment test will be programmed for those students who decide to opt for this second system.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions, and teamwork.

This course will be very practical, with application to real cases of professionals and companies.

An active learning methodology will be developed through lectures, with practical case proposals for open discussion in the classroom. Students will be offered materials and readings that are useful for the follow-up of the seminars and the resolution of the practical cases. Particular attention will be given to current topics during the term, which may be subject to practical cases. Finally, the students will be asked to perform and orally present two small teamwork assignments as an application of the knowledge acquired in the course.

4.2. Learning tasks

The course includes the following learning tasks:

- **Lectures.** Professional responsibility in the design and calculation of projects, in the direction of work, in paid positions, by signing documents, by accepting orders, writing technical or expert reports, adjudications, and management systems. Code of ethics and codes of business ethics. Principles, obligations. Examples.
- **Practice sessions.** Practical cases of responsibility and ethical conflicts in the exercise of the profession, work in a company, in project management and contracts, conflicts of veracity, conflicts of independence, relationship with other professionals, relationship with clients.
- **Teamwork.** Analysis of a case of professional activity where to distinguish and evaluate the different types of personal responsibility. Analysis of a situation of ethical dilemma in the exercise of the profession.

4.3. Syllabus

The course will address the following topics:

1. Professional and Criminal Liability

- Engineering and architecture as a profession.
- Types of professional activities. Types of projects. Relations with administrations and processing of documents.
- Professional Liability.
- Personal Risk Management: risk estimation, what to insure and how.
- Possible procedures or ways of claim: civil, labor, administrative, criminal.
- Responsibility according to the function: Designer, Director of Work, employee, corporate responsibility. Practical examples.
- Responsibility of the Engineer and the Architect in the current legal system Spanish: Law 38/1999 and others.

2. Ethics and Professional Deontology

- Fundamental ethics and applied ethics. Approaches to professional ethics.
- The Principle of Responsibility in professional exercise.
- Deontological norms: professional codes, ethics of business organizations, ethics of public administrations, etc.
- Examples of codes of professional organizations.
- Structures and regulatory development for the application of ethical codes in professional and business organizations.
- Tools for making decisions in professional practice. Practical cases of ethical dilemmas.

4.4. Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the College of Higher Engineering and Architecture (EINA) website (https://eina.unizar.es/) and Moodle.